IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Nathan R. Belk
Serial No.:	10/694,074
Filing Date:	October 27, 2003
Art Unit:	2622
Confirmation No.:	3795
Examiner:	Brian P. Yenke
Title:	*AN INTEGRATED CHANNEL FILTER AND METHOD OF OPERATION*

Mail Stop AF
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

The following Pre-Appeal Brief Request for Review ("Request") is being filed in accordance with the provisions set forth in the Official Gazette Notice of July 12, 2005 ("OG Notice"). Pursuant to the OG Notice, this Request is being filed concurrently with a Notice of Appeal. Applicant respectfully requests reconsideration of the rejected claims in the Application.

REMARKS

In the prosecution of the present Application, the PTO's rejections and assertions contain clear errors of law. Most notable of the legal errors present in the examination of the Application is a failure of the Final Office Action dated August 13, 2008, and the Advisory Action dated October 23, 2008 to establish a *prima facie* rejection of the claims as detailed below.

Section 103 Rejection

Claims 1-8, 10-11, and 26-27 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent 6,177,964 to Birleson ("*Birleson*") in view of U.S. Patent 7,196,737 to Fulga ("*Fulga*"). Claim 1 recites a system, comprising:

> a filter operable to receive an input signal comprising a first number of television channels and further operable to communicate an intermediate output signal comprising a second number of television channels less than the first number of television channels, wherein at least a portion of the filter is formed on an integrated circuit so as to dissipate a plurality of undesired channels associated with the input signal in elements of the integrated circuit such that at least a portion of the undesired signals are not reflected back to a transmitter of the input signal; and
>
> a tuner coupled to the filter and operable to receive the intermediate output signal and further operable to communicate an output signal comprising a third number of television channels less than the second number of television channels, wherein at least a portion of the tuner is formed on the integrated circuit.

To reject Claim 1 the Examiner cites Figure 1 of *Birleson*, which describes a broadband television tuner 10. See Final Office Action, p. 3 and *Birleson*, Col. 7, line 45 to Col. 9, line 67. *Birleson* describes an input filter 101 that "passes all channels in the television band." *Birleson*, Col. 7, lines 56-61. The Examiner further states:

> Birleson discloses that filter 101 in the invention is used to retrieve all TV signals wherein Prior Art the use of a filter to filter some of the channels is traditionally used (col 7, line 56-61). Thus, by simply replacing the filter 101 of Birleson with the conventional filter, would render obvious the pending claims.

See Final Office Action, p. 3.

The Examiner also incorporates *Fulga* and states that it was known to use a prefilter (101 in Figure 1 of *Fulga*) to receive a first number of channels and provide a

fewer number of channels to a tuner 140. See Final Office Action, p. 3, and *Fulga*, Fig. 1 and Col. 2, line 59 to Col. 3, line 5. The filters described by *Birleson* are not filters wherein "at least a portion of the filter is formed on an integrated circuit" as described in Claim 1. See *Birleson*, Col. 5, lines 29-41 and Col. 7, lines 24-26. In addition, the *Birleson-Fulga* combination is improper. Each of the cited references, *Birleson* and *Fulga*, specifically teach away from relevant aspects of Claim 1. "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983), *cert. denied,* 469 U.S. 851 (1984). (M.P.E.P. § 2141.02). Moreover, although the Supreme Court recently denounced the rigid application of the "TSM" test in *KSR v. Teleflex*, 127 S.Ct. 1727 (2007), the Federal Circuit has subsequently found a patent not obvious where the relevant prior art taught away from the claimed invention. *Takeda Chemical v. Alphapharm*, 2007 WL 1839698 (Fed. Cir. 2007). Because the references teach away from aspects of Claim 1, the Examiner has failed to establish a *prima facie* rejection of the claims under 35 U.S.C. § 103(a).

In the Examiner's response in the Final Office Action to Applicant's previously submitted arguments, the Examiner states that "it was known to filter down or not the number of channels in a receiving system." See Final Office Action, p. 2. The Examiner then states "if a person of ordinary skill in the art can implement a predictable variation *and would see the benefit of doing so* a [sic] obviousness rejection likely bars it's [sic] patentability." See Final Office Action, p. 2 (emphasis added). Applicant asserts that a person of ordinary skill in the art would not implement this variation of *Birleson* because *Birleson* explicitly rejects this modification as being a source of error, as explained below.

Birleson explicitly teaches away from "a filter operable to receive an input signal comprising a first number of television channels and further operable to communicate an intermediate output signal comprising a second number of television channels less than the first number of television channels," as recited, in part, in Claim 1. *Birleson* states, "filter 101 passes **all** channels in the television band" (Col. 7, lines 61; emphasis added), and "[i]n operation, the front end of tuner 10 receives the **entire** television band through filter 101 and amplifier 102" (Col. 8, lines 40-41; emphasis added). Thus, *Birleson* explicitly

teaches away from elements of Claim 1. Like *Birleson*, *Fulga* also teaches away from elements of Claim 1. In particular, *Fulga* cites to *Birleson* and states, "the input filter 101 is **not** tuned to select a few channels but instead passes **all** channels in the television band." *Fulga*, Col. 2, lines 66-67; emphasis added.

Additionally, *Birleson* describes the reason why it does not filter the input signal:

> To accomplish this, an architecture was chosen to perform an up-conversion of the RF input signal to a higher internal frequency, which allows the present invention to have minimal filtering on the input stages of the receiver. The present invention is therefore able to operate without variable-tuned input filtering. **This eliminates the need for precisely controlled variable tuned filters** which must be mechanically aligned during manufacture and are subject to variation in performance due to age, temperature, humidity, vibration and power supply performance. **This was a critical drawback of previous tuners that had to be eliminated** because it is a source of tremendous error and distortion, as well as complexity.
>
> The present invention allows a wide band of frequencies to enter the front end of the tuner circuit without removing frequencies in an input band pass tracking filter.
>
> *Birleson*, Col. 3, lines 9-24 (emphasis added).

Therefore, as discussed above, *Birleson* not only teaches away from using "a filter operable to receive an input signal comprising a first number of television channels and further operable to communicate an intermediate output signal comprising a second number of television channels less than the first number of television channels," as recited, in part, in Claim 1, but also explicitly rejects an input filter as a solution. Thus, a person skilled in the art would not see the benefit of this variation, as claimed by the Examiner in the Final Office Action. As both of the Examiner's references teach away from the claimed invention, the *Birleson-Fulga* combination is improper and the Examiner has failed to establish a *prima facie* case of obviousness under 35 U.S.C. § 103.

For at least the above reasons, Applicant respectfully requests allowance of Claim 1. The Examiner makes similar improper rejections of the remaining dependent and independent claims. For at least the reasons set forth above with respect to Claim 1, Applicant respectfully requests allowance of Claims 2-8, 10-11, and 26-27.

CONCLUSION

As a *prima facie* rejection has not been established against Applicant's currently rejected claims, Applicant respectfully requests a finding of allowance of all claims in the Application.

To the extent necessary, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of BAKER BOTTS L.L.P.

Respectfully submitted,

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